

What is Claimed is:

1. A PVR (Personal Video Recorder) system comprising:
 - a channel demodulating part for receiving, and demodulating a broadcasting program on a particular channel;
 - a storage medium for storing the broadcasting program;
 - an EPG parsing part for extracting information on the broadcasting program intended to record from a data demodulated at the channel demodulating part;
 - an upload/download controlling part for receiving the broadcasting program intended to record from the channel demodulating part, storing the broadcasting program in the storage medium, and controlling reproduction of the broadcasting program stored in the storage medium in response to an external recording/reproduction signal, and controlling the EPG parsing part; and
 - a re-recording processing part for storing identifying information for identifying success of recording of the broadcasting program intended to record and information on the broadcasting program intended to record, and identifying the identifying information, to request re-transmission of the broadcasting program intended to record through a network when recording of the broadcasting program intended to record fails, or to renew the information on the broadcasting program intended to record.
2. The PVR system as claimed in claim 1, wherein the channel demodulating part includes:
 - a channel receiving part for tuning to, and demodulating a broadcasting signal on a particular channel, and forwarding in a form of a transport TP stream, and
 - a TP processing part for splitting the TP stream from the channel receiving part into

an audio PES stream, a video PES stream, and a data stream.

3. The PVR system as claimed in claim 1, wherein the storage medium is a hard disc.

4. The PVR system as claimed in claim 1, wherein the information on the broadcasting program extracted at the EPG parsing part is channel information, a record starting time, and a record end time, of the broadcasting program intended to record.

5. The PVR system as claimed in claim 4, wherein the record starting time is a starting time of the program intended to record if the recording is a scheduled recording, and a time when a recording/time shift button is pressed if the recording is a direct recording or a time shift.

6. The PVR system as claimed in claim 1, wherein the upload/download controlling part initializes a recording flag value at the re-recording processing part to a first identifying information value in response to an external recording signal, sets the first identifying information value to a second identifying information value if the recording of the broadcasting program intended to record is successful, and maintains the first identifying value as it is if the recording of the broadcasting program intended to record fails.

7. The PVR system as claimed in claim 6, wherein the first identifying information value is set to '1', and the second identifying information value is reset to '0'.

8. The PVR system as claimed in claim 1, wherein the re-recording processing part

includes;

a recording parameter storage part for storing identifying information for identifying success of recording of the broadcasting program intended to record, and information on the broadcasting program intended to record, and

a network interface part for identifying the identifying information, to request re-transmission of the broadcasting program intended to record through a network when recording of the broadcasting program intended to record fails, or to renew the information on the broadcasting program intended to record.

9. The PVR system as claimed in claim 8, wherein the recording parameter storage part is a ROM (read-only memory).

10. The PVR system as claimed in claim 8, wherein the recording parameter storage part includes one bit of identifying information field, 20 bits of record starting time field, 20 bits of record end time field, and 7 bits of channel information field.

11. The PVR system as claimed in claim 10, wherein the record starting time field, or the record end time field includes 4 bits of month field, 5 bits of day field, 5 bits of hour field, and 6 bits of minute field.

12. The PVR system as claimed in claim 8, wherein the network interface part is a LAN or a MODEM.

13. The PVR system as claimed in claim 8, wherein the network interface part is

connected to a program server or a broadcasting station for communication.

14. A method for recording a video in a PVR system having a storage medium for storing a broadcasting program intended to record, and a re-recording processing part having a recording parameter storage part and a network interface part, comprising the steps of:

setting a recording parameter field at the recording parameter storage part, and storing information on the broadcasting program intended to record and identifying information for identifying success of recording of the broadcasting program in the recording parameter field, according to user's recording setting information;

writing the broadcasting program on the storage medium according to the information on the broadcasting program;

determining success of recording of the broadcasting program according to the identifying information; and

if the recording of the broadcasting program fails as a result of the determination, requesting re-transmission of the broadcasting program intended to record through the network interface part, or renewing the information on the broadcasting program stored in the recording parameter storage part.

15. The method as claimed in claim 14, wherein the user's recording setting information is information related to at least one of recording, scheduled recording, time shift.

16. The method as claimed in claim 14, wherein the recording parameter field includes one bit of identifying information field, 20 bits of record starting time field, 20 bits of record end time field, and 7 bits of channel information field.

17. The method as claimed in claim 16, wherein the record starting time field, or the record end time field includes 4 bits of month field, 5 bits of day field, 5 bits of hour field, and 6 bits of minute field.

18. The method as claimed in claim 14, wherein the broadcasting program information includes channel information, record starting time, and record end time of the recording program, and the record starting time is a starting time of the program intended to record in a case of the scheduled recording, and a time when a recording/time shift button is pressed in a case of direct recording or a time shift.

19. The method as claimed in claim 14, further comprising the steps of:

(a) determining successive recording of the broadcasting program intended to record; and

(b) changing identifying information value stored in the recording parameter storage part if the recording is successful as a result of the determination, and maintaining the identifying information value stored in the recording parameter storage part as it is if the recording fails, after the step of writing the broadcasting program on the storage medium.

20. The method as claimed in claim 19, wherein the step (b) includes the steps of; resetting the identifying information value set to '1' at the recording parameter storage part to '0' if the recording is successful as a result of the determination, and maintaining the identifying information value set to '1' at the recording parameter storage part as it is if the recording fails.

21. The method as claimed in claim 19, further comprising the step of changing the identifying information value stored in the recording parameter storage part if there is a user's record stop request.

22. The method as claimed in claim 19, further comprising the step of maintaining the identifying information values of the broadcasting programs other than one program to be '1' if the user requests writing of more than one programs at the same time.

23. The method as claimed in claim 14, further comprising the steps of:
transmitting information on the broadcasting program having recording thereof failed to a program server or a broadcasting station; and
re-receiving the broadcasting program having recording thereof failed from the program server or the broadcasting station, and writing the broadcasting program having recording thereof failed, after step of requesting re-transmission of the broadcasting program intended to record through the network interface part.

24. The method as claimed in claim 23, wherein the information on the transmitted broadcasting program is a program ID for matching to the program.

25. The method as claimed in claim 14, wherein the step of renewing the information on the broadcasting program stored in the recording parameter storage part includes the steps of;
re-receiving program related information from the program server or the broadcasting

station; and

overwriting the program related information on a relevant position of the recording parameter storage part, and scheduling writing of the program automatically by using stored record starting time, and record end time.

26. The method as claimed in claim 25, wherein the overwritten program related information is channel information, a record starting time, a record end time, of a recording program.